RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:

10 535,5

Source:

Date Processed by STIC:

5-27-05

ENTERED



DATE: 05/27/2005 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/535,523 TIME: 10:49:53

Input Set : A:\seq listing.app

Output Set: N:\CRF4\05272005\J535523.raw

3 <110> APPLICANT: The Government of the United States of America 5 <120> TITLE OF INVENTION: CELL LINES AND HOST NUCLEIC ACIDS RELATED TO INFECTIOUS DISEASES 7 <130> FILE REFERENCE: 6395-66741-06 (P5.6-7)

C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/535,523

C--> 9 <141> CURRENT FILING DATE: 2005-05-17

9 <150> PRIOR APPLICATION NUMBER: PCT/03/037143

10 <151> PRIOR FILING DATE: 2003-11-18

12 <150> PRIOR APPLICATION NUMBER: US 60/482,604

13 <151> PRIOR FILING DATE: 2003-06-25

15 <150> PRIOR APPLICATION NUMBER: US 60/427,464

16 <151> PRIOR FILING DATE: 2002-11-18

18 <160> NUMBER OF SEQ ID NOS: 845

20 <170> SOFTWARE: PatentIn version 3.2

22 <210> SEQ ID NO: 1

23 <211> LENGTH: 937

24 <212> TYPE: DNA

25 <213> ORGANISM: Homo sapiens

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68 <211> LENGTH: 1515

69 <212> TYPE: DNA

70 <213> ORGANISM: Homo sapiens

73 <220> FEATURE:

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Output Set: N:\CRF4\05272005\J535523.raw

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     83 tatgcagtgc tgccataacc atgagtgata acactgcggc caacttactt ctgacaacga
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     85 tcggaggacc gaaggagcta accgcttttt tgcacaacat gggggatcat gtaactcgcc
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     87 ttgatcgttg ggaaccggag ctgaatgaag ccataccaaa cgacgagcgt gacaccacga
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     89 tgcctgcagc aatggcaaca acgttgcgca aactattaac tggcgaacta cttactctag
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     91 cttcccggca acaattaata gactggatgg aggcggataa agttgcagga ccacttctgc
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     93 gctcggccct tccggctggc tggtttattg ctgataaatc tggagccggt gagcgtgggt
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     95 ctcgcggtat cattgcagca ctggggccag atggtaagcc ctcccgtatc gtagttatct
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     111 nccaaataaa tetgtaaagg teacaggtga agttettete tttaagaget actecatget
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     115 cttttcaata agtaagcatg ctttgctctg cactgggtgt cacctgtgtt ggatgctgtt
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     117 gtccctgcct tgccctatat tctgtccaca tggtttcttc ataggatgat gcttaggtca
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     119 gccctgaggt ttgaaccagt caacaagtcc aggttggtgt ggagtccctt tagtacctcc
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     121 ctttgcagga ataatgctgc acccagaaac tccctcagag cctctccact gggaggggcc
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     123 ttgtgaccat tcctggttta ctcctcttgt tccagcatcc catgtggcca atgggcccct
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     125 ttcattttca atggtatctc anttnttaca gtaagttata ttattgccct acatngaact
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     127 catctttttt cantgttacc tgnngaagaa tggnnaagga tgcccnaaan tnggcccaaa
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                                                                               120
     148 ttgcaaggca tggaaaaata cataactgag aatagaaaag ttcagatcga ggtcaggaac
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     150 agatggaaca gggtcgaccg gtcgaccggt cgaccctaga gaaccatcag atgtttccag
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     152 ggtgccccaa ggacctgaaa tgaccctgtg ccttatttga actaaccaat cagttcgctt
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     154 ctcgcttctg ttcgcgcgct tctgctcccc gagctcaata aaagagccca caacccctca
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     156 ctcggggcgc cagtcctccg attgactgag tcgcccgggt acccgtgtat ccaataaacc
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     158 ctcttgcagt tgcatccgac ttgtggtctc gctgttcctt gggagggtct cctctgagtg
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     160 attgactacc cgtcagcggg ggtctttcac tctctgtgta ctggtaccaa cagagcctgg
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     162 accagggcct ccagttcctc attcagtatt ataatggaga agagagagca aaaggaaaca
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     166 ctctggagct gggggactca gctttgtatt tctgtgccag cagcgtaggt ggtagcttga
                                                                             72.0
                                                                             780
     168 aacaqttett egggeeaggg acaeggetea eegtgetagg taagaagggg geteeagtgg
     170 gagagaggt gagcagccca ncctgnncga ccccanancc tgttnttagg ggagtggnca
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     178 <213 > ORGANISM: Homo sapiens
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     184 <223> OTHER INFORMATION: n is a, g, c, or t
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                                                                             180
     191 gaaaagcata ccccacagtg tcagtggagg caacatgggg tcctggattt cctcttcacc
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     193 ctcaqtgqta qtqaqgtgtt cctctcactc cttctgagta gaggaagcca agaggaaagc
                                                                             300
     195 tqqaacttqt accatcatcc agtqqtqata aagcctctqt ccctccacct tacccccagg
     197 ttatcagtgg caaccacatg gctagtggta cccctcccgc tcctagccag aatgatatca
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     199 gcagaggect agagagtage ccaaaaaete atetgeaeee ageaggaetg aggttteeta
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     201 cececaceaa tggaageeaa gtgaggaace taageettea ceteteacte ageaggaace
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     205 gtatcaagga ggcttgataa aatagaagat ttaaatagga tccattgccc ttatctcaaa
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     207 ctcttattat gaaatcactc ccttgagaga gaaaaaagcc tttttctctt ggattgtccc
     209 agcagetece gaecatecee acteeceaac ettatgtgge eecageaatg agectagtag
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W--> 211 taggaaaatc tctatggata ctggtgctga tgggaagatt cttcctctca ngaagtgatg
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                                                                             840
     213 gtgactgggg ctctgggatg ctcacgggaa tnccatttcc cccacaagaa nttattttat
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     215 naccaaccat ttggatgacc cctttttntt ccatttncca annaatttgt aaggncaaag
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     219 <211> LENGTH: 869
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     234 ctactccatg ctaagttcag cgagaacttg gggtacccta gacattcttc cagagatgct
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     236 tttcttgtaa ctcttttcaa taagtaagca tgctttgctc tgcactgggt gtcacctgtg
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     238 ttggatgetg ttgtccctgc cttgccctat attctgtcca catggtttct tcataggatg
     240 atgettaggt cagecetgag gtttgaacca gtcaacaagt ccaggttggt gtggagteec
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     242 tttagtacct ccctttgcag gaataatgct gcacccagaa actccctcag agcctctcca
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     244 ctqqaqqqqc cttqtqacca ttcctqqttt actcctcttq ttccaqcatc ccatqtqqcc
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     246 aatgggcccc tttcattttc aatggtatct caattcttac agtaagttat attattgccc
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     248 tacatcgaac tcatcttttc tcagtgttac ctgaggaaga atggagagga tgcccagaat
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     250 tggcccagaa gaatccactt cgattctaga gaaaaaggca ggtagaggca gaagagattc
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Output Set: N:\CRF4\05272005\J535523.raw

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     254 ctqtaaaact tgggaagagg aacctgccct gggtcaagta gggtgttggg aggaccagat
                                                                               780
                                                                               840
     256 ggaqcttgaa gctctctcca tctttgtcaa gtcccctgga ctgagagggn aaaatnacat
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     277 tgcaaggcat ggaaaaatac ataactgaga atagaaaagt tcagatcgag gtcaggaaca
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     279 gatggaacag ggtcgaccgg tcgaccggtc gaccctagag aaccatcaga tgtttccagg
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     281 gtgccccaag gacctgaaat gaccctgtgc cttatttgaa ctaaccaatc agttcgcttc
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     285 teggggegee agteeteega ttgaetgagt egeeegggta eeegtgtate eaataaacee
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     287 tettgeagtt geateegact tgtggteteg etgtteettg ggagggtete etetgagtga
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     318 gagcatetea gegteacteg etgtecagtt getgtgatea ggtgetttgg ggtttgtgtg
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     320 actccagaat ccactgggcc tgtgtgtcag aagacaaaag ttaaccataa ggcacagaag
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     322 aaaqcctcct gctgaagcca tcgttggccc acatgcattt cagggacaag aaatqaagat
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     324 cggagacttt caagttgtgc ccaggactca cctgctccca ggagacaaaa ggccacacag
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     326 cagaggagec tgaageecat ggeaggatet cetagettgg ggetggtgte tetgtagtaa
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     328 gcattctgaa gttcctaagc tcccttcttc ctgataggag cattgacctg tgatgtcacc
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     330 acactgacat actttcccct gcaggccact ccagcccact gtactctttg gcaggcctca
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     334 gactgaacac agtaccaaca tacccacatc acaccttact ttcctctgcc cgccctgtcc
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     336 ctqccctgac actgattccc cagcccttgc caccccagcc ccttcaccct ccactgcccg
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     338 tqcaqcagca gagacactcc ctccttgatg caaactgagg cctctgqcac cccaactctt
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RAW SEQUENCE LISTING DATE: 05/27/2005 PATENT APPLICATION: US/10/535,523 TIME: 10:49:53

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Output Set: N:\CRF4\05272005\J535523.raw

		tcagggcaat gatagtctgt gcttaactct				780
M>		acctagaatt tcatatncag ccaaactaag	cttcataagt	gaaggggaaa	taaaatgctt	840
		tacagac .				847
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W>		taagtgcaag tttattttta tttttttt				120
		caggetagag tgcagtggca tgatettggc				180
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		qttaattttt gtacttttag tagagacagg				300
		ctcctgacct caggtgatcc tcctgcctca				360
		agctaccacg totggcotaa gtgcatgtta	_			420
		gaatgagaac agtctcctga acatcttgcc				480
		gcctccccat aatttctagt ctcagcagaa				540
		gaaattaacc aattaagtaa cctgggttgg	_			600
		ctgccacagg tatatccttt ctctcancca				660
		catannaana atttggaaga ctanaaaatc				720
		agtatggnan cctgggccgg nacatncata				755
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		cacccagget agagtgcagt ggcatgatct				300
		caagtgattc tcttgcctca gcctcccaag	_			360
		cccggttaat ttttgtactt ttagtagaga				420
		caaactcctg acctcaggtg atcctcctgc				480
		catgagetac caegtetgge ctaagtgeat cetegaatga gaacagtete etgaacatet	-			540
		ctaagectee ccataattte tagteteage				600
		tgatgaaatt aaccaattaa gtaacctggg				660
		cctcctgcca caggtatatc ctttctctca				720
		cacacataga aanaatttgg aagactagaa				780
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/27/2005 PATENT APPLICATION: US/10/535,523 TIME: 10:49:54

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Output Set: N:\CRF4\05272005\J535523.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:3; N Pos. 9,801,806,807,816,818,825,838,858,862,868,875,880,883
Seg#:4; N Pos. 771,812,831,841,868,877,882,883,895
Seq#:5; N Pos. 6,8,21,830,836,863,865
Seq#:6; N Pos. 801,816,836,847
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Seq#:12; N Pos. 15,26,626,645,684,704,709,716,721,722,723,731,734,746
Seg#:13; N Pos. 11,27,29,606,635,646,651,653,657,660,667,677,681,682,689
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Seq#:14; N Pos. 11,27,40,700,706,716,745,749,761,790
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Seq#:17; N Pos. 2,3,22,86,695,741
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Seq#:19; N Pos. 7,9,521,568,621,629,632,637,641,648,653,659,663,672,687,695
Seq#:19; N Pos. 709,712,715,721,733,739,745,747,758,759,763,764,766,768
Seq#:20; N Pos. 6,8,733,746,752,759,760,790,803,807,821,822,823,828,830,847
Seg#:20; N Pos. 848,856,860,861,869,872,874,876,881,882,895,912
Seq#:21; N Pos. 2,7,36,723,724,778,799,817,1461,1553,1586,1597,1599,1604
Seq#:22; N Pos. 8,22,712,798,837
Seq#:23; N Pos. 8,13,14,22,44,47,54,73,76,87,117,129,1519,1534,1539,1547
Seg#:23; N Pos. 1548,1550,1558,1560
Seq#:24; N Pos. 498,503,506,652,655,656,658,794,821,834,858,1335,1368,1375
Seq#:24; N Pos. 1402,1435,1437
Seq#:25; N Pos. 8,9,15,32,680,683,700,732,736,745,754,763,764,774,787,797
Seq#:25; N Pos. 800,805,809,814,815,816,819,830
Seq#:26; N Pos. 5,740,744,746,770,778,784,785,795,802,820,827,839,842,845
Seq#:26; N Pos. 852,854
Seq#:27; N Pos. 6,7,234,235,236,797,807,822,830,839,845,864,870,873
Seq#:28; N Pos. 3,9,13,16,17,18,19,20,21,24,27,30,31,32,33,34,39,43,47,49
Seq#:28; N Pos. 50,51,54,56,57,798,806,820,833,853,855,864,865,878,880,884
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/27/2005 PATENT APPLICATION: US/10/535,523 TIME: 10:49:54

Input Set : A:\seq listing.app

Output Set: N:\CRF4\05272005\J535523.raw

Seq#:28; N Pos. 885,891,894,900,901

Seq#:29; N Pos. 2,8,9,18,23,26,35,41,50,809,813,826

Seq#:30; N Pos. 2,3,4,14,18,19,20,27,28,29,31,32,34,38,41,48,49,50,65,72,85

Seq#:30; N Pos. 90,99,771,782,789,822,827,848,858,862,872,873,879,881,884

Seq#:30; N Pos. 885,888,889

Seq#:31; N Pos. 12,21,574,604,688,691,713,715

Seq#:32; N Pos. 6,250

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:238,239,240,241

VERIFICATION SUMMARY DATE: 05/27/2005 PATENT APPLICATION: US/10/535,523 TIME: 10:49:54

Input Set : A:\seq listing.app

Output Set: N:\CRF4\05272005\J535523.raw

```
L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
M:341 Repeated in SeqNo=1
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo=2
L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
M:341 Repeated in SeqNo=3
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:720
M:341 Repeated in SeqNo=4
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
M:341 Repeated in SeqNo=5
L:299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:780
M:341 Repeated in SeqNo=6
L:342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:780
L:359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
M:341 Repeated in SeqNo=8
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
M:341 Repeated in SeqNo=9
L:439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
M:341 Repeated in SeqNo=10
L:480 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11
L:517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
M:341 Repeated in SeqNo=12
L:556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
M:341 Repeated in SeqNo=13
L:595 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
M:341 Repeated in SeqNo=14
L:636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
M:341 Repeated in SeqNo=15
L:677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
M:341 Repeated in SeqNo=16
L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
M:341 Repeated in SeqNo=17
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
M:341 Repeated in SeqNo=18
L:796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
M:341 Repeated in SeqNo=19
L:835 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
M:341 Repeated in SeqNo=20
L:880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
M:341 Repeated in SeqNo=21
L:947 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
M:341 Repeated in SeqNo=22
L:990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
M:341 Repeated in SeqNo=23
```

L:1073 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:480

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/535,523 T

DATE: 05/27/2005 TIME: 10:49:54

Input Set : A:\seq listing.app

Output Set: N:\CRF4\05272005\J535523.raw

M:341 Repeated in SeqNo=24

L:1120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0

M:341 Repeated in SeqNo=25

L:1161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0